

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM

Page 1

Item ID: D350-748-201

Accept

Revision ID: D

Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009 Start Qty: 1.00

Required Date: 9/29/2009 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: PL mtf Date: 09-9-08 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

N/A

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile &amp; type labels per PPPD350-748-201

CHC 100

110

0.00



BENDING MACHINE - CROSSTUBES

CNC Bend 2

Memo

0.00

CNC Alpha 160 Bender

Bend tube as per Dwg D350-748-241 using CNC bender program D350A and Folio FT \_\_\_\_\_

120

0.00



QC15- Crosstube Dimensional Check

QC

Memo


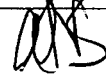
0.00

Quality Control

**SCRAP***SCRAP**AD**dk**MB 10-01-14*

W/O: /		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-748-201 PAR #: \_\_\_\_\_ Fault Category: cross tubes NCR: (Yes) No DQA: / Date: 10/02/11  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: / Date: 10/02/11

NCR: <u>51883</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10.01.14	110	TUBE OVERBENT IN FIRST OPERATION  2 + 1" RC Process	 10/01/14 PSI 042	SCRAP 10.01.14 10.01.14	AWM 10-1-2014	S 10/02/14	 10/01/14 PSI 042	J 10/02/14

NOTE: Date & initial all entries

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM

Page 2

Item ID: D350-748-201

Accept

Revision ID: D

Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009 Start Qty: 1.00

Required Date: 9/29/2009 Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start  
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130  Crosstubes	Crosstubes	0.00							
Crosstubes	<b>Memo</b> 1-Drill Tube as per Dwg D350-748-241 Using 5/8" Drill Bit Set-up drill table as per QSI 010  2-Deburr  3-Engrave Part # and Batch # as per Dwg D350-748-241  4-Remove all marks from tube within limits of D350-748-241  5- Apply a light coat of LPS3 on the interior of tube Batch: _____	0.00							
140  QC	QC6- Inspect dimensions to drawing	0.00							
Quality Control	<b>Memo</b>	0.00							

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM

Page 3

Item ID: D350-748-201

Accept

Revision ID: D

Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009 Start Qty: 1.00

Required Date: 9/29/2009 Req'd Qty: 1.00

Cust Item ID:

Customer:




Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150  Outsource3	Outsource process-Cadplate per QSI017 4.1.9.1	0.00							
Outsource process - Cad plate	<b>Memo</b> Issue P/O: _____ Stress relief at 375° for 5 hours Magnetic Particle Inspect per ASTM E1444 Cadium Plate per AMS-QQ-P-416B, Class 1, Type 2 Embrittle relief at 375° for 8 hours, Chromate Treat Possible Supplier: Southwest United Industries Ensure Certificate of Conformity is attached	0.00							
160  Packaging	Receive & Inspect for Damage & Mat'l Certs.	0.00							
Packaging	<b>Memo</b> Ensure certificate of conformity is attached	0.00							
170  QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	<b>Memo</b>	0.00							

**SCRAP**

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM



Page 4

Item ID: D350-748-201

Accept



Setup Start



Revision ID: D

Stop



Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 9/29/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 	SprayPaint	0.00							
SprayPaint	Memo	0.00							
Spray Painting	1-Prime inside crosstube as per QSI 005 4.2 2-Paint Outside of Tube as per Dart QSI 005 4.2								
190 	QC14- Inspect Spray Paint	0.00							
QC	Memo	0.00							
Quality Control	Then, Wrap in plastic bag to protect from scratches								
200 	Crosstubes	0.00							
Crosstubes	Memo	0.00							
Crosstubes	1-Install Ground wire Insert, then insert screw and washer 2-Install Abraison strips as per Dwg D350-748-241 & QSI 035. 3-Install supports Using Dt8876 as per Dwg D350-748-241, Torque to 60-80 IN- LBS								

**SCRAP**

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM



Page 5

Item ID: D350-748-201

Accept



Setup Start



Revision ID: D

Stop



Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 9/29/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							
220 	Pick Kit	0.00							
Packaging Packaging	Memo	0.00							
230 	QC4- 100% Inspect kits for completeness	0.00							
QC Quality Control	Memo	0.00							

**SCRAP**

**Work Order ID 51883**

Tuesday, September 08, 2009 3:15:18 PM

Page 6

Item ID: D350-748-201

Accept

Revision ID: D

Item Name: Crosstube Installation, High Aft



Start Date: 9/9/2009 Start Qty: 1.00

Required Date: 9/29/2009 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \_\_\_\_\_  
Stop \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240		0.00	SCRAP						
	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-748-201 Location: _____ PPP Rev: _____								
250	QC21- Final Inspection - Work Order Release	0.00							
									
QC	Memo	0.00							
Quality Control									

W 10/02/10

# Picklist Print

Tuesday, September 08, 2009 3:15:27 PM

Page 1

Work Order ID: 51883

Parent Item: D350-748-201RevD

Parent Item Name: Crosstube Installation, High Aft

Comments:

Start Date: 9/9/2009

Required Date: 9/29/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D350-748- 241TRNRevD		Manufactured	No			110	Each	4.0000	1.0000			



Crosstube Turning Detail



B-48604 MB 10-0-13

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FG	4	
47167	1	
47170	1	
47171	1	
47172	1	

ALS4-1032-225

Purchased

No



Insert

200 Each 8,753.000 1.0000



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	8753	
107441	16	
110768	8737	

SCRAP



# Picklist Print

Page 2

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883

Parent Item: D350-748-201RevD

Parent Item Name: Crosstube Installation, High Aft


Comments:

Start Date: 9/9/2009

Required Date: 9/29/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD10		Purchased	No			200	Each	2,309.000	1.0000			
												
Washer												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	2309	
105442	95	
109059	2	
109840	23	
110985	202	
111279	13	
111668	70	
112314	1000	
112369	904	

D2856-400RevA

Manufactured No

200

f

332.4577 1.2432



Abraison Strip

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	122.8077	
42437	44.93	
46543	77.8777	
Main Warehouse		
ST403	209.65	
50593	209.65	

SCRAP

1- cut as per dwg D2856

Tuesday, September 08, 2009 3:15:27 PM

Shop Packet Print

Page 2

# Picklist Print

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3502-1RevB		Manufactured	No			200	Each	43.0000	2.0000			
Support												

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	5	
41603	2	
42968	2	
47120	1	

Main Warehouse

ST168	38	
50287	38	

MS21920-20

Purchased

No

200

Each

117.3000

2.0000



Clamp (per MIL-DTL-8783C)

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	117.3	
103478	2	
106484	12	
109269	9.3	
110536	10	
111281	34	
112307	50	

SCRAP

# Picklist Print

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039-1-10		Purchased	No			200	Each	37.0000	1.0000			

Screw

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	37	
111425	37	

AN4-41A		Purchased	No			220	Each	142.0000	8.0000			

Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	142	
105940	4	
110363	16	
110731	50	
111424	50	
112082	22	

SCRAP

# Picklist Print

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-6A 		Purchased	No			220	Each	814.0000	16.0000			

Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	814	
102602	3	
105810	15	
107534	1	
109545	2	
110399	27	
111279	466	
112314	300	

AN5-32A

Purchased

No

220

Each

79.0000

4.0000



Bolt

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	79	
106242	3	
106519	4	
110363	17	
111916	5	
112082	50	

SCRAP

# Picklist Print

Page 6

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD416		Purchased	No			220	Each	8,758.000	32.0000			

Washer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	8758	
102929	2	
105906	4	
107321	23	
107939	114	
108161	553	
108827	31	
109249	69	
110523	340	
111279	115	
111916	2620	
112314	4887	
16941	0	

SCRAP

Tuesday, September 08, 2009 3:15:27 PM

Shop Packet Print

Page 6

# Picklist Print

Page 7

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD516 		Purchased	No			220	Each	1,209.000	8.0000			
Washer												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	1209	
100564	2	
106167	6	
107534	34	
107959	43	
108246	46	
108672	2	
109059	49	
109752	22	
110363	46	
110523	57	
111279	43	
112082	359	
112314	500	

SCRAP

D3500-1RevC

Manufactured No



220

Each

17.0000

4.0000



Saddle

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	17	
47119	12	
47350	5	

Tuesday, September 08, 2009 3:15:27 PM

Shop Packet Print

Page 7

# Picklist Print

Page 8

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3501-1RevA		Manufactured	No			220	Each	423.0000	16.0000			

Bushing

<u>Warehouse</u>	<u>Loc</u>	<u>Qty</u>	<u>Loc Code</u>
<u>Location</u>			
Main Warehouse			
ST		423	
45402		19	
45918		200	
48268		204	

MS21042L4

Purchased

No

220

Each

8,308.000

24.0000



Nut

<u>Warehouse</u>	<u>Loc</u>	<u>Qty</u>	<u>Loc Code</u>
<u>Location</u>			
Main Warehouse			
ST		8308	
107499		5	
110507		266	
111827		5996	
112314		2000	
15924		0	
8182		41	

SCRAP

Tuesday, September 08, 2009 3:15:27 PM

Shop Packet Print

Page 8

# Picklist Print

Page 9

Tuesday, September 08, 2009 3:15:27 PM

Work Order ID: 51883



Parent Item: D350-748-201RevD



Parent Item Name: Crosstube Installation, High Aft

Start Date: 9/9/2009

Required Date: 9/29/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L5		Purchased	No			220	Each	1,337.000	4.0000			

Nut

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	1337	
110382	10	
111636	327	
112314	1000	

SCRAP

Tuesday, September 08, 2009 3:15:27 PM

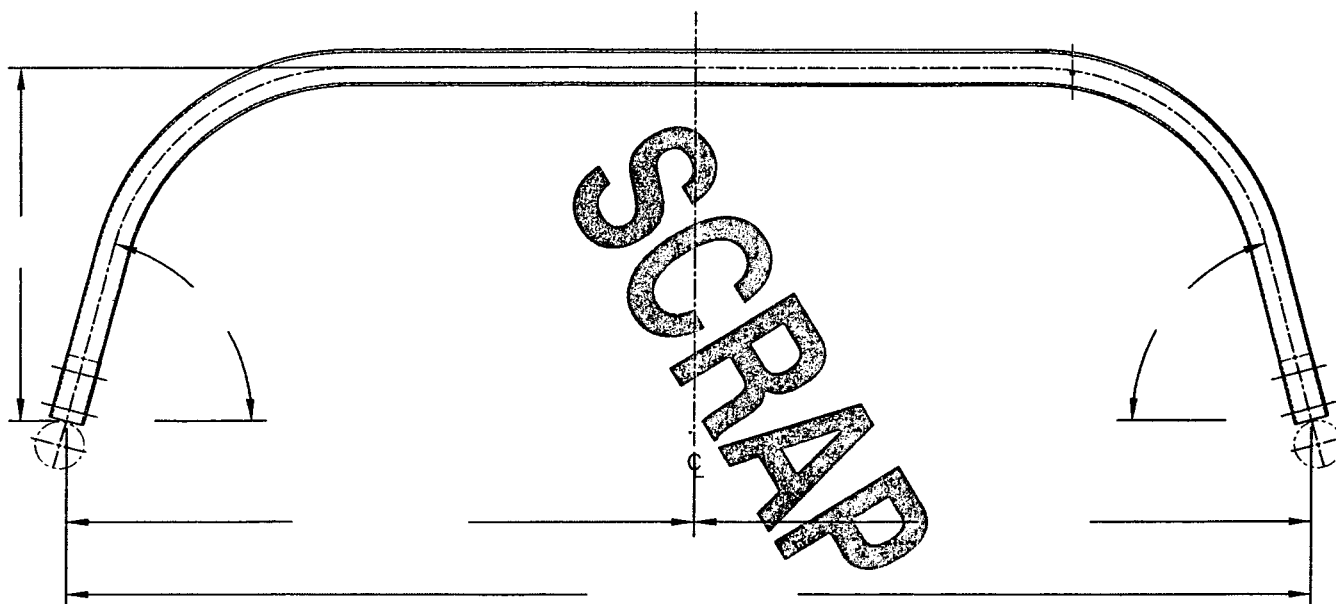
Shop Packet Print

Page 9



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 51893
<b>Description:</b> Crosstube High Aft (AS350/355)		<b>Part Number:</b> D350-748-201
<b>Inspection Dwg:</b> D350-748-241 <b>Rev:</b> D		<b>Page 1 of 1</b>

Required Dimension	Min	Max
Height	31.22	31.48
1/2 Span	40.77	41.03
Angle	75	77
Total Span	81.54	82.06



Comments

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	

**DART****RELEASED**

06.10.31

DESIGN <i>qp</i>	DRAWN BY <i>qp</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>///</i>	APPROVED <i>///</i>	DRAWING NO. D350-748-241	REV. D SHEET 1 OF 3
DATE 06.10.31		TITLE CROSSTUBE (AS 350/355 HI AFT)	SCALE NTS
A	06.03.31	NEW ISSUE	
B	06.06.30	ADD D6018-125 & PRIME AND PAINT	
C	06.08.14	ADD CAD PLATING	
D	06.10.31	MAG. PARTICLE AND CAD PLATE AS MFD.	

QTY	P/N	DESCRIPTION
X	D350-748-241	CROSSTUBE ASSEMBLY (AS 350/355 HI AFT)
1	D6018-125	CROSSTUBE (OR D6015-125)
2	D3502-1	SUPPORT
2	D2856-400-710	ABRASION STRIP
1	AELS-1032-225	INSERT
1	AN960JD10	WASHER
2	MS21920-20	CLAMP (PER DART SPEC. M-MS21920-20)
1	MS27039-1-10	SCREW

**D350-748-141 CROSSTUBE:**

- 1) MATERIAL: MANUFACTURED FROM D6018-125 OR D6015-125  
FINISHED LENGTH = 122.70±0.06
- 2) MACHINE PER MACHINING DETAIL ON PAGE 3. BLEND OUT ALL EDGES FROM MACHINING LONGITUDINALLY, TRANSITIONS SHOULD BE SMOOTH. NOTE: ALL HOLES ARE DRILLED AFTER BENDING.
- 3) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 4) BEND PROGRESSIVELY WITH A MINIMUM OF 7 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 5) HEAT TREAT TO MIN. 180 KSI PER MIL-T-6736 OR AMS 2759-1C AFTER TURNING
- 6) FINISH: MAGNETIC PARTICLE INSPECT PER DART QSI 038 4.2  
CADMIUM PLATE PER AMS-QQ-P-416B, CLASS 1, TYPE II  
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2  
PAINT OUTSIDE PER DART QSI 005 4.2
- 7) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE. WHEN DRILLING HOLES EXTREME CARE MUST BE TAKEN AND CAREFUL DEBURRING PERFORMED TO ENSURE A CLEAN HOLE WITH NO CRACKING/CHIPPING/GROOVES.
- 8) INSTALL D2856-400-710 ABRASION STRIP WITH A GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D3502-1 SUPPORT, PER QSI 035.
- 9) TORQUE MS21920-20 CLAMPS 60 TO 80 IN-LB
- 10) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 11) ALL DIMENSIONS ARE IN INCHES
- 12) PART IS SYMMETRIC ABOUT CENTERLINE EXCEPT FOR Ø0.297 HOLE.

**UNDER REVIEW**

09.02.05

PER PCR 309-001

RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 07.02.16

**UNDER REVIEW**

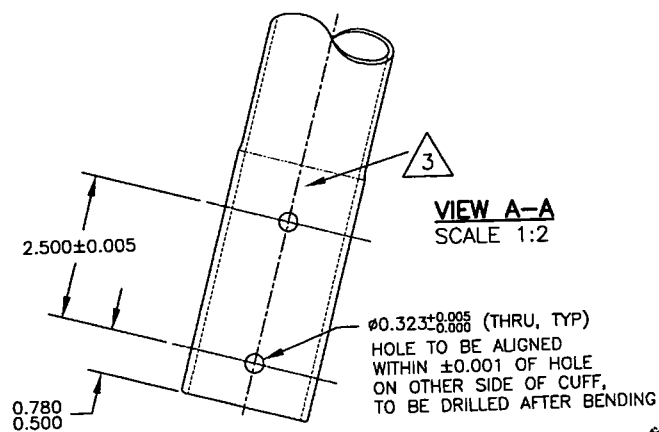
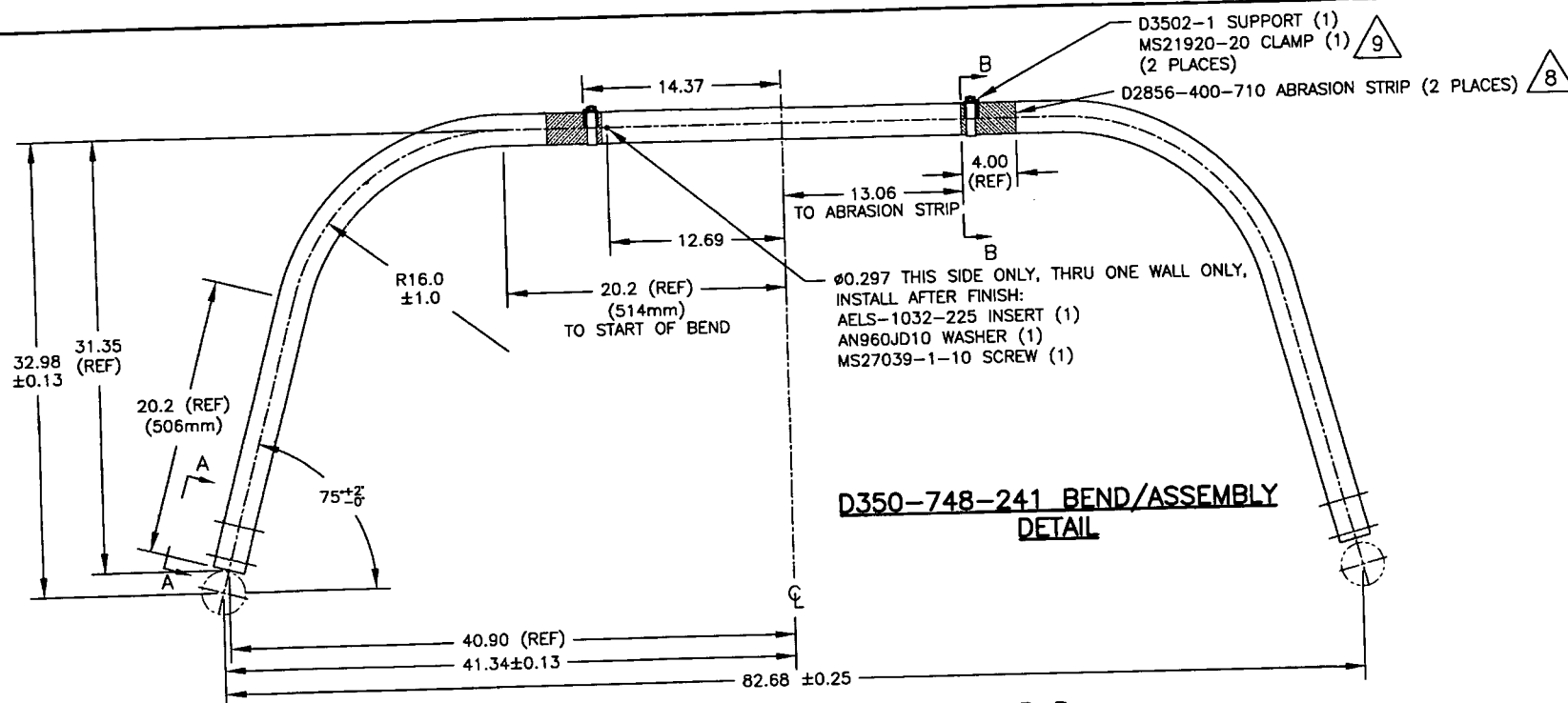
07.02.16

COP. FILED 07.02.16

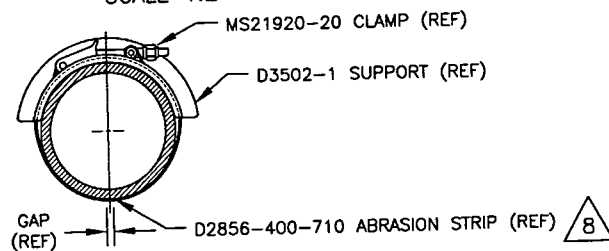
OK 07.02.16

**Copyright © 2006 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



**SECTION B-B**  
SCALE 1:2



UNDER REVIEW

09.02.05

UNDER REVIEW

07.02.16

OK 12.10.22

RELEASED

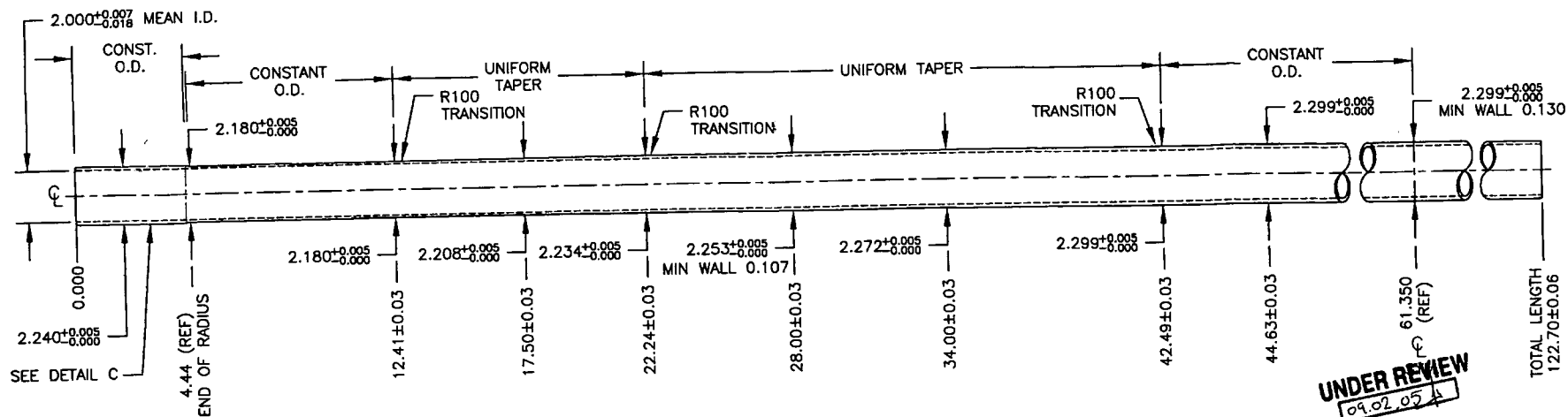
06.10.31

COPYRIGHT © 2008 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

DESIGN	40	DRAWN BY	40	<b>DART</b>	DART AEROSPACE LTD. MISSISSAUGA, ONTARIO, CANADA
CHECKED	#	APPROVED	#	DRAWING NO.	D350-748-241
DATE	06.10.31	TITLE	CROSSTUBE (AS 350/355 HI AFT)		
					REV. D SHEET 2 OF 3 SCALE 1:8

51883

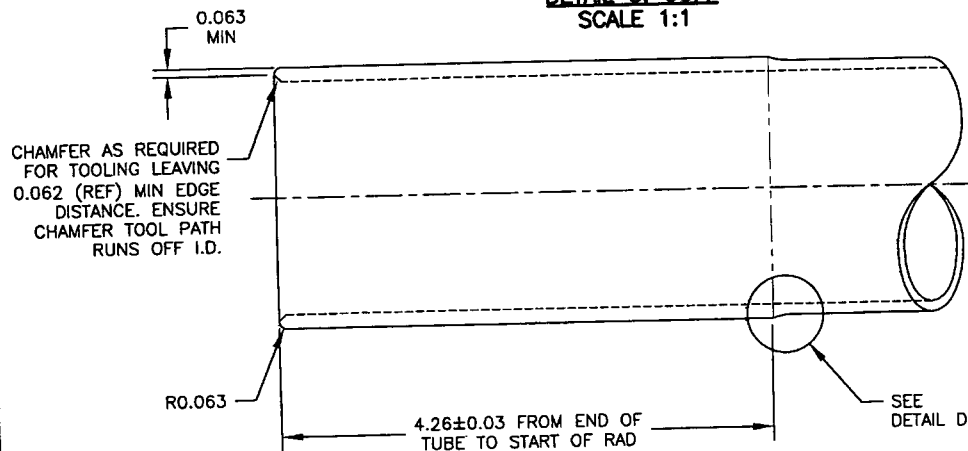


# D350-748-241 MACHINING DETAIL

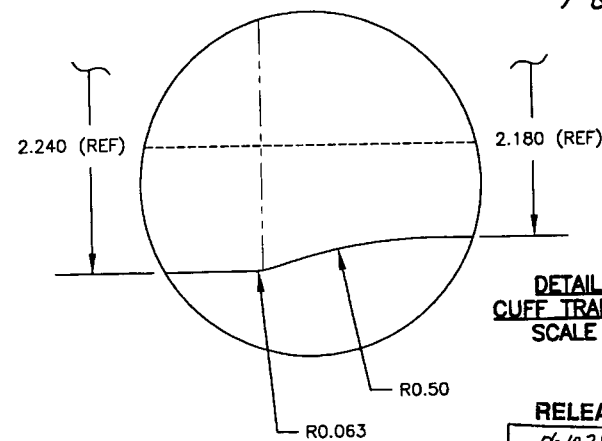
UNDER REVIEW  
09.02.07

UNDER REVIEW  
09.02.07  
OK 09.02.07

## DETAIL C: CUFF SCALE 1:1



51883



## DETAIL D: CUFF TRANSITION SCALE 9:1

RELEASED  
06.10.31

COPYRIGHT © 2008 BY DART AEROSPACE LTD.		DESIGN	q7	DRAWN BY	q7	<b>DART</b>	DART AEROSPACE LTD.
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	#	APPROVED	#	DRAWING NO.	REV. D
		DATE	06.10.31			D350-748-241	SHEET 3 OF 3
						TITLE	SCALE
						CROSSTUBE (AS 350/355 HI AFT)	1:4